PUBLISHED

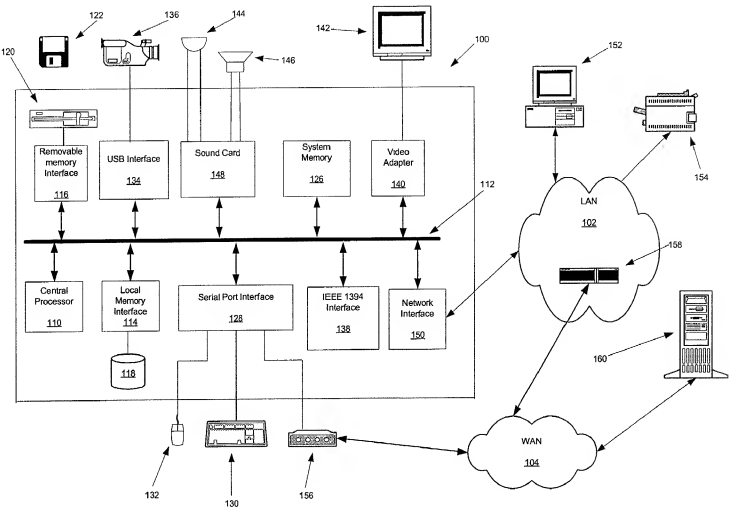



FIG. 1

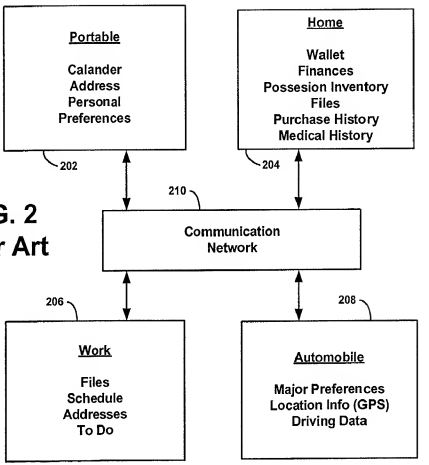



FIG. 2
Prior Art

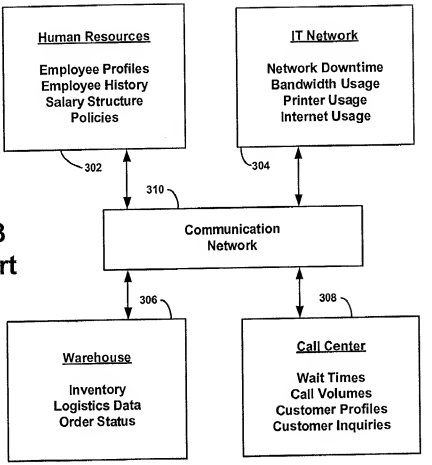



FIG. 3
Prior Art

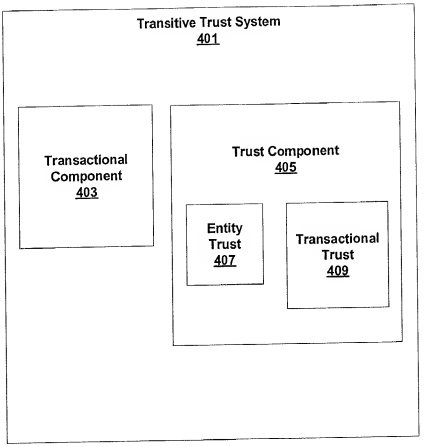

Transitive Trust System
401
Transactional Component
403
Trust Component
405
Entity Trust
407
Transactional Trust
409

FIG. 4a

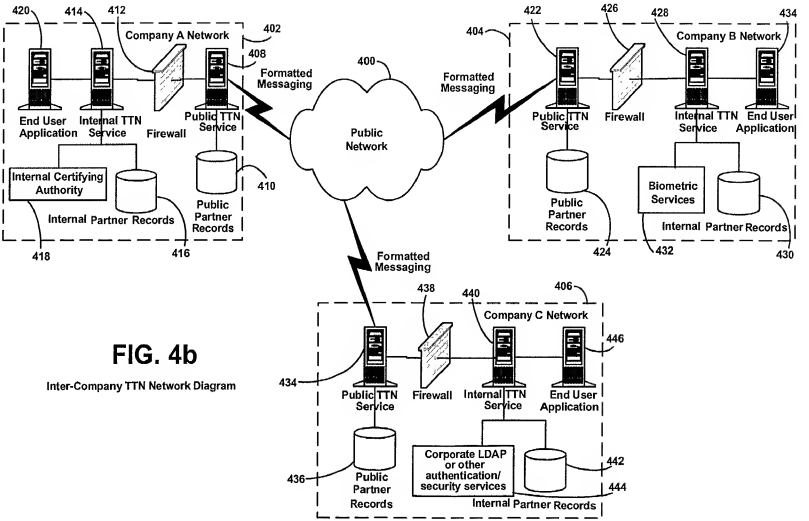



**FIG. 4b**

Inter-Company TTN Network Diagram

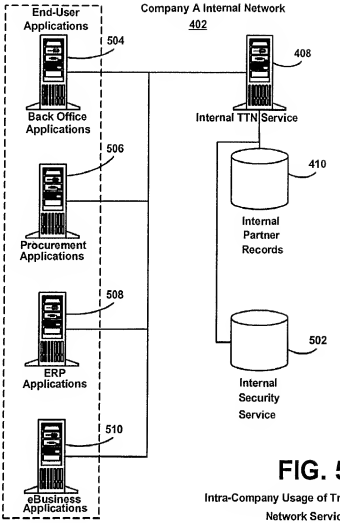



FIG. 5

Intra-Company Usage of Transitive Trust Network Service

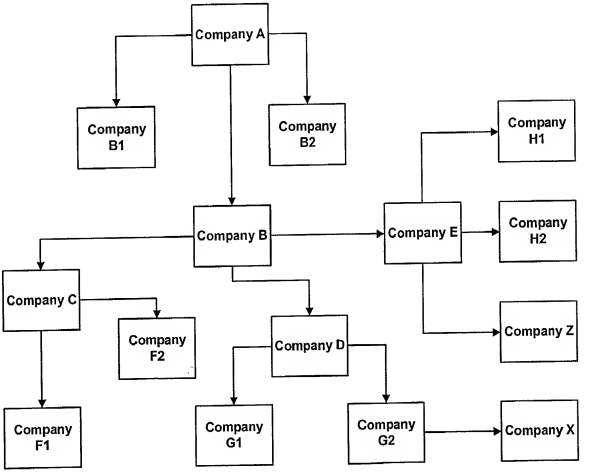
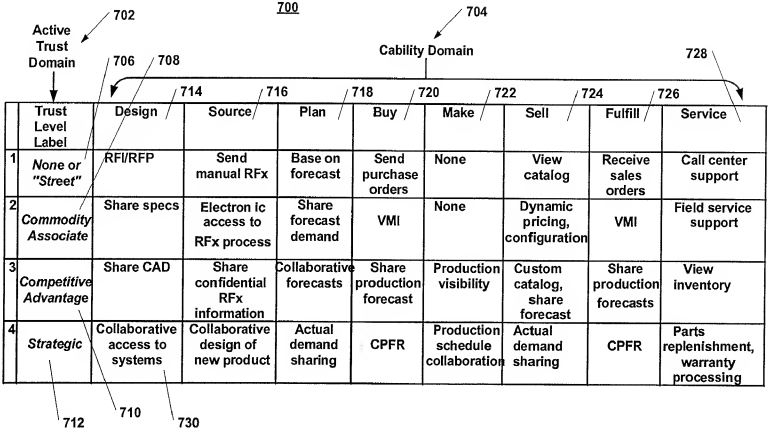

Company A
Company B1
Company B2
Company H1
Company B
Company E
Company H2
Company C
Company F2
Company D
Company Z
Company F1
Company G1
Company G2
Company X

FIG. 6




| | Trust Level Label | Design | Source | Plan | Buy | Make | Sell | Fulfill | Service |
|---|---|---|---|---|---|---|---|---|---|
| 1 | *None or "Street"* | RFI/RFP | Send manual RFx | Base on forecast | Send purchase orders | None | View catalog | Receive sales orders | Call center support |
| 2 | *Commodity Associate* | Share specs | Electron ic access to RFx process | Share forecast demand | VMI | None | Dynamic pricing, configuration | VMI | Field service support |
| 3 | *Competitive Advantage* | Share CAD | Share confidential RFx information | Collaborative forecasts | Share production forecast | Production visibility | Custom catalog, share forecast | Share production forecasts | View inventory |
| 4 | *Strategic* | Collaborative access to systems | Collaborative design of new product | Actual demand sharing | CPFR | Production schedule collaboration | Actual demand sharing | CPFR | Parts replenishment, warranty processing |



FIG. 7

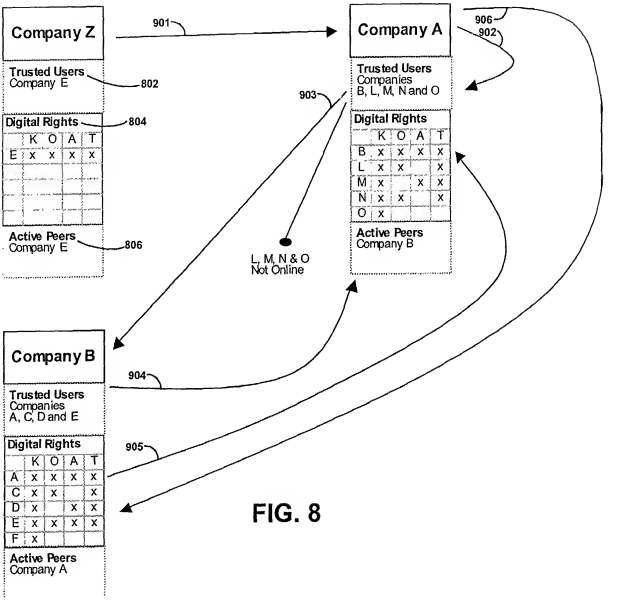

Company Z
Trusted Users
Company E
802
Digital Rights
804
K O A T
E x x x x
Active Peers
Company E
806
901
Company A
906
902
Trusted Users
Companies
B, L, M, N and O
903
Digital Rights
K O A T
B x x x x
L x x x
M x x x
N x x x
O x
Active Peers
Company B
L, M, N & O
Not Online
Company B
904
Trusted Users
Companies
A, C, D and E
Digital Rights
905
K O A T
A x x x x
C x x x
D x x x
E x x x x
F x
Active Peers
Company A

FIG. 8

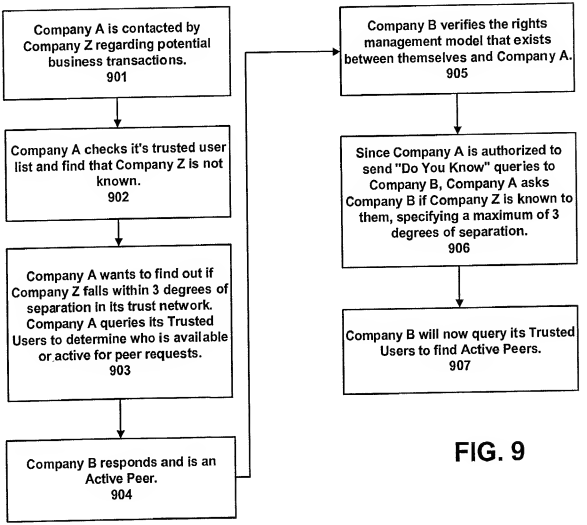

Company A is contacted by Company Z regarding potential business transactions.
901
Company A checks it's trusted user list and find that Company Z is not known.
902
Company A wants to find out if Company Z falls within 3 degrees of separation in its trust network. Company A queries its Trusted Users to determine who is available or active for peer requests.
903
Company B responds and is an Active Peer.
904
Company B verifies the rights management model that exists between themselves and Company A.
905
Since Company A is authorized to send "Do You Know" queries to Company B, Company A asks Company B if Company Z is known to them, specifying a maximum of 3 degrees of separation.
906
Company B will now query its Trusted Users to find Active Peers.
907

FIG. 9

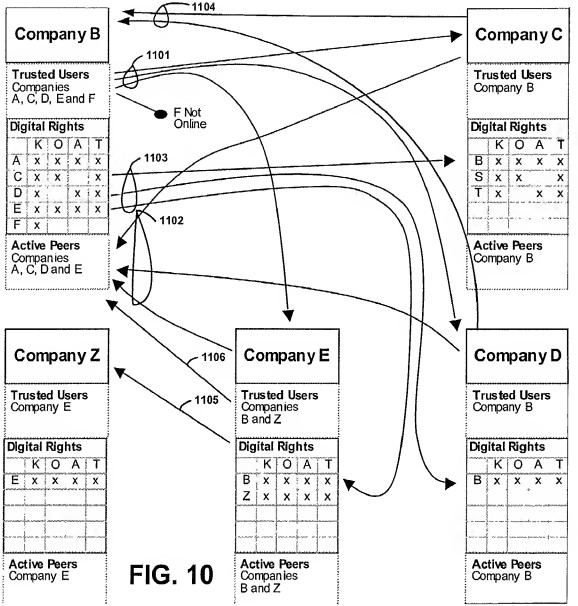

Company B
Trusted Users
Companies
A, C, D, E and F
Digital Rights
K O A T
A x x x x
C x x x
D x x x
E x x x x
F x
Active Peers
Companies
A, C, D and E
1104
1101
F Not
Online
1103
1102
Company C
Trusted Users
Company B
Digital Rights
K O A T
B x x x x
S x x x
T x x x
Active Peers
Company B
Company Z
Trusted Users
Company E
Digital Rights
K O A T
E x x x x
Active Peers
Company E
1106
1105
Company E
Trusted Users
Companies
B and Z
Digital Rights
K O A T
B x x x x
Z x x x x
Active Peers
Companies
B and Z
Company D
Trusted Users
Company B
Digital Rights
K O A T
B x x x x
Active Peers
Company B

FIG. 10

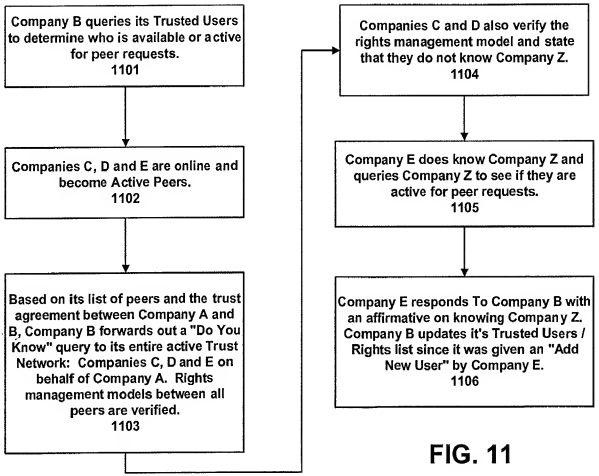

Company B queries its Trusted Users to determine who is available or active for peer requests.
1101
Companies C, D and E are online and become Active Peers.
1102
Based on its list of peers and the trust agreement between Company A and B, Company B forwards out a "Do You Know" query to its entire active Trust Network: Companies C, D and E on behalf of Company A. Rights management models between all peers are verified.
1103
Companies C and D also verify the rights management model and state that they do not know Company Z.
1104
Company E does know Company Z and queries Company Z to see if they are active for peer requests.
1105
Company E responds To Company B with an affirmative on knowing Company Z. Company B updates it's Trusted Users / Rights list since it was given an "Add New User" by Company E.
1106

FIG. 11

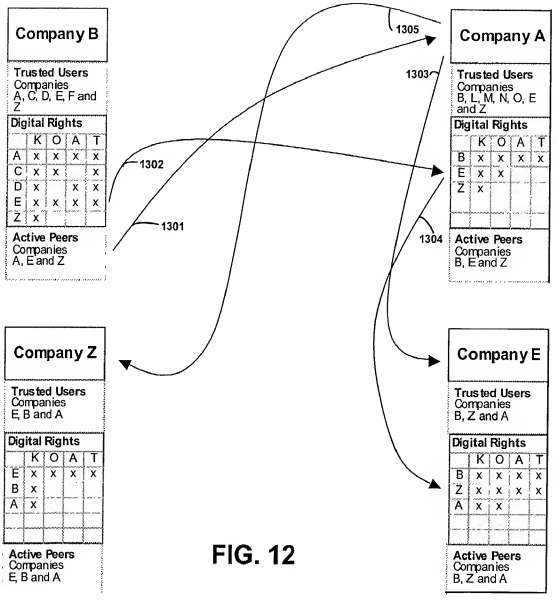

Company B
Trusted Users
Companies
A, C, D, E, F and Z
Digital Rights
K O A T
A x x x x
C x x x
D x x x
E x x x x
Z x
Active Peers
Companies
A, E and Z
Company A
Trusted Users
Companies
B, L, M, N, O, E and Z
Digital Rights
K O A T
B x x x x
E x x
Z x
Active Peers
Companies
B, E and Z
Company Z
Trusted Users
Companies
E, B and A
Digital Rights
K O A T
E x x x x
B x
A x
Active Peers
Companies
E, B and A
Company E
Trusted Users
Companies
B, Z and A
Digital Rights
K O A T
B x x x x
Z x x x x
A x x
Active Peers
Companies
B, Z and A
1301
1302
1303
1304
1305

FIG. 12

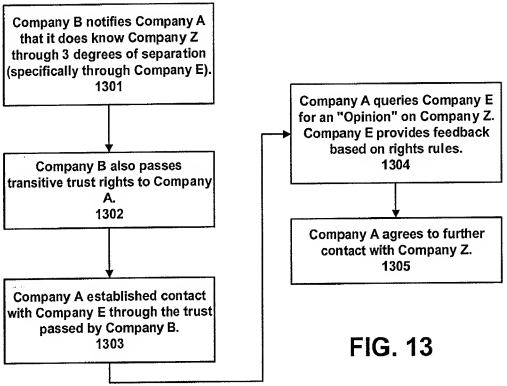

Company B notifies Company A that it does know Company Z through 3 degrees of separation (specifically through Company E).
1301
Company B also passes transitive trust rights to Company A.
1302
Company A established contact with Company E through the trust passed by Company B.
1303
Company A queries Company E for an "Opinion" on Company Z. Company E provides feedback based on rights rules.
1304
Company A agrees to further contact with Company Z.
1305

FIG. 13

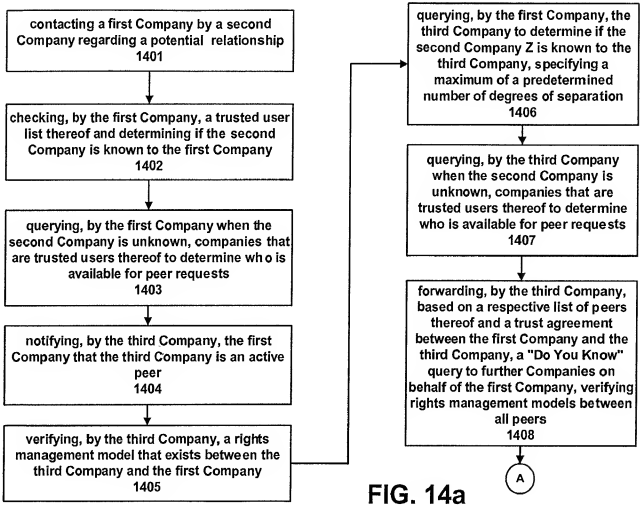

contacting a first Company by a second Company regarding a potential relationship
1401
checking, by the first Company, a trusted user list thereof and determining if the second Company is known to the first Company
1402
querying, by the first Company when the second Company is unknown, companies that are trusted users thereof to determine who is available for peer requests
1403
notifying, by the third Company, the first Company that the third Company is an active peer
1404
verifying, by the third Company, a rights management model that exists between the third Company and the first Company
1405
querying, by the first Company, the third Company to determine if the second Company Z is known to the third Company, specifying a maximum of a predetermined number of degrees of separation
1406
querying, by the third Company when the second Company is unknown, companies that are trusted users thereof to determine who is available for peer requests
1407
forwarding, by the third Company, based on a respective list of peers thereof and a trust agreement between the first Company and the third Company, a "Do You Know" query to further Companies on behalf of the first Company, verifying rights management models between all peers
1408
A

FIG. 14a

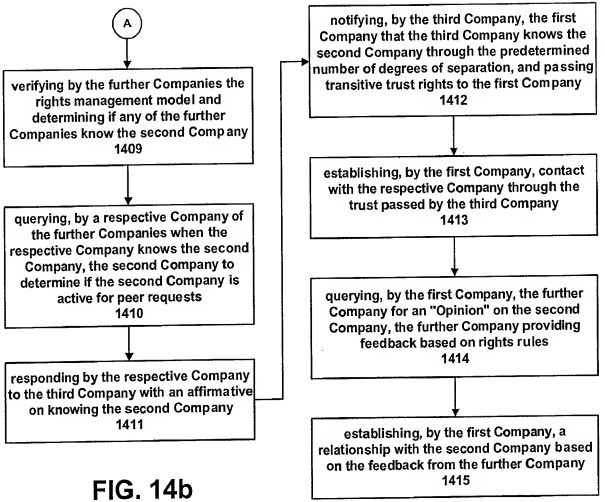

A
verifying by the further Companies the rights management model and determining if any of the further Companies know the second Company 1409
querying, by a respective Company of the further Companies when the respective Company knows the second Company, the second Company to determine if the second Company is active for peer requests 1410
responding by the respective Company to the third Company with an affirmative on knowing the second Company 1411
notifying, by the third Company, the first Company that the third Company knows the second Company through the predetermined number of degrees of separation, and passing transitive trust rights to the first Company 1412
establishing, by the first Company, contact with the respective Company through the trust passed by the third Company 1413
querying, by the first Company, the further Company for an "Opinion" on the second Company, the further Company providing feedback based on rights rules 1414
establishing, by the first Company, a relationship with the second Company based on the feedback from the further Company 1415

FIG. 14b

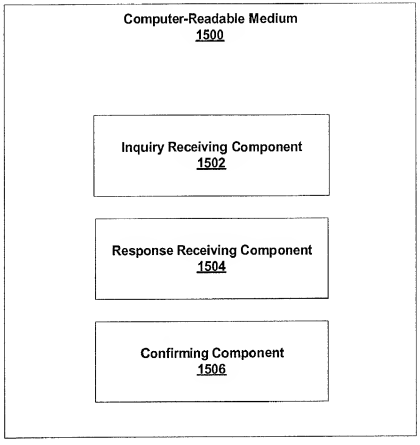

Computer-Readable Medium
1500
Inquiry Receiving Component
1502
Response Receiving Component
1504
Confirming Component
1506

FIG. 15